

AMENDMENTS TO THE CLAIMS

1 16. through 38. (Canceled).

1 39. (New) A method of satisfying a resource request in a computer system for
2 configuring systems using a resource comprising a combination of resources, the method
3 comprising:
4 instantiating in the computer system a configuration instance from a configuration model,
5 wherein the configuration model includes a defined structural hierarchy of
6 elements and a plurality of resources offered by elements in the structural model
7 hierarchy;
8 (a) examining the configuration instance for an element offering a resource in response to
9 a request for the resource, wherein the resource offered by at least one of the
10 elements in the structural model hierarchy represents a combination of multiple
11 like resources;
12 (b) selecting the element when the resource has not been previously consumed;
13 (c) selecting a newly created element instance that offers the resource if no existing
14 elements satisfy the resource request; and
15 (d) repeating (a) through (d) when the element selection does not satisfy the resource
16 request.

1 40. (New) The method of claim 39 wherein the combination of multiple like
2 resources comprises pooled resources.

1 41. (New) The method of claim 40 wherein each element offering a resource that
2 includes a pool of resources is a structural superior in the structural model hierarchy to an
3 element consuming the resource.

1 42. (New) The method of claim 40 wherein a plurality of the resources in the pool of
2 resources combine to satisfy the resource request.

1 43. (New) The method of claim 40 wherein one of the resources in the pool of
2 resources satisfies the resource request.

1 44. (New) The method of claim 40 wherein the element offering the resource
2 includes multiple power supplies whose combined power supply capacity is pooled to provide
3 the requested resource.

4 45. (New) The method of claim 39 wherein the combination of multiple like
5 resources comprises resources inherited from at least one other element.

1 46. (New) The method of claim 45 wherein each element offering a resource
2 includes resources inherited from at least one other element is a structural superior in the
3 structural model hierarchy to an element consuming the resource.

1 47. (New) The method of claim 45 wherein a plurality of the resources inherited
2 from at least one other element combines to satisfy the resource request.

1 48. (New) The method of claim 45 wherein one of the resources inherited from at
2 least one other element satisfies the resource request.

1 49. (New) The method of claim 39 wherein the configuration instance is empty when
2 a new configuration is being defined and the configuration instance includes an existing
3 configuration when an existing system is being updated.

1 50. (New) An apparatus for configuring systems comprising:
2 a processor;
3 a memory coupled to the processor;
4 a model stored in the memory, wherein elements included in the model are defined in a
5 structural model hierarchy and each of the elements offers one or more resources;

6 a configuration engine, stored in the memory and executable by the processor, to satisfy a
7 resource request using a resource comprising a combination of resources, wherein
8 the configuration engine includes code executable by the processor for:
9 instantiating in the computer system a configuration instance;
10 (a) examining the configuration instance for an element offering a resource in
11 response to a request for the resource, wherein the resource offered by at
12 least one of the elements in the structural model hierarchy represents a
13 combination of multiple like resources;
14 (b) selecting the element when the resource has not been previously consumed;
15 (c) selecting a newly created element instance that offers the resource if no
16 existing elements satisfy the resource request; and
17 (d) repeating step (a) through (d) when the element selection does not satisfy the
18 resource request.

1 51. (New) The method of claim 50 wherein the combination of multiple like
2 resources comprises pooled resources.

1 52. (New) The method of claim 51 wherein each element offering a resource that
2 includes a pool of resources is a structural superior in the structural model hierarchy to an
3 element consuming the resource.

1 53. (New) The method of claim 51 wherein a plurality of the resources in the pool of
2 resources combine to satisfy the resource request.

1 54. (New) The method of claim 51 wherein one of the resources in the pool of
2 resources satisfies the resource request.

1 55. (New) The method of claim 51 wherein the element offering the resource
2 includes multiple power supplies whose combined power supply capacity is pooled to provide
3 the requested resource.

4 56. (New) The method of claim 51 wherein the combination of multiple like
5 resources comprises resources inherited from at least one other element

1 57. (New) The method of claim 50 wherein each element offering a resource
2 includes resources inherited from at least one other element is a structural superior in the
3 structural model hierarchy to an element consuming the resource.

1 58. (New) The method of claim 57 wherein a plurality of the resources inherited
2 from at least one other element combines to satisfy the resource request.

1 59. (New) The method of claim 57 wherein one of the resources inherited from at
2 least one other element satisfies the resource request.

1 60. (New) The method of claim 50 wherein the configuration instance is empty when
2 a new configuration is being defined and the configuration instance includes an existing
3 configuration when an existing system is being updated.

1 61. (New) An article of manufacture comprising code encoded therein and
2 executable by a processor to cause the processor to:
3 instantiate in the computer system a configuration instance from a configuration model,
4 wherein the configuration model includes a defined structural hierarchy of
5 elements and a plurality of resources offered by elements in the structural model
6 hierarchy;
7 (a) examine the configuration instance for an element offering a resource in response to a
8 request for the resource, wherein the resource offered by at least one of the
9 elements in the structural model hierarchy represents a combination of multiple
10 like resources;

- (b) select the element when the resource has not been previously consumed;
- (c) select a newly created element instance that offers the resource if no existing elements satisfy the resource request; and
- (d) repeat (a) through (d) when the element selection does not satisfy the resource request.

62. (New) An apparatus for satisfying a resource request in a computer system for configuring systems using a resource comprising a combination of resources comprising:

- a processor;
- a memory coupled to the processor;
- a model stored in the memory, wherein elements included in the model are defined in a structural model hierarchy and each of the elements offers one or more resources;

means for defining a structural model hierarchy and a plurality of resources offered by elements in the structural model hierarchy;

means for instantiating in the computer system a configuration instance;

- (a) means for examining the configuration instance for an element offering a resource in response to a request for the resource, wherein the resource offered by at least one of the elements in the structural model hierarchy represents a combination of multiple like resources;
- (b) means for selecting the element when the resource has not been previously consumed;
- (c) means for selecting a newly created element instance that offers the resource if no existing elements satisfy the resource request; and
- (d) means for causing (a) through (d) to search for another element to satisfy the resource request when the element selection does not satisfy the resource request.